

CLAIMS

What is claimed is:

5 1. A method for automatically correcting for depth errors in measurements taken from a drillstring comprising the steps of:

 receiving data representing measurements taken
 in a hydrocarbon wellbore at a plurality of depths
10 within the wellbore from at least one sensor located on a drillstring used to drill the wellbore;
 automatically calculating corrections for errors in the depth of the locations; and
 making use of the measured data having the
15 depths corrected.

 2. A method according to claim 1 wherein the step of automatically calculating the corrections is based at least in part on the state of a drilling rig used to
20 support the drillstring at the times when the measurements are taken.

 3. A method according to claim 1 wherein further comprising the step of measuring the length of portions
25 of the drillstring prior to insertion into the wellbore.

 4. A method according to claim 3 wherein a time versus depth log is constructed using at least the measured length of portions of the drillstring.
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 5. A method according to claim 4 wherein the calculated corrections is applied to time versus depth

log to generate a corrected time versus depth log, and wherein the corrected time versus depth log is combined with the data representing measurements taken in the wellbore such that a corrected depth can be attributed to
5 said measurements.

6. A method according to claim 1 wherein said step of calculating corrections is based in part on estimates of stretch of the length of the drillstring.
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7. A method according to claim 1 wherein said step of calculating corrections includes the step of computing the hookload.

15 8. A method according to claim 7 wherein said step of calculating corrections includes the step of computing a calculated hookload and varying the friction factor or the weight on bit until the hookload and the calculated hookload match.

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